

<p><b>99-191213/17</b>      <b>A86 G04</b>      <b>HARD/97.09.04</b>  <b>HARDER T</b>      *DE 19738605-A1  97.09.04 97DE-1038605 (99.03.11) E01C 13/00, A63C 19/02, 19/06,  A63F 3/00, G02F 1/23, A63F 9/00, C09K 9/02  <b>Boundary and other line markings for sports surfaces</b>  <b>C99-056420</b>  Addnl. Data: <b>HARDER T</b></p>	<p><b>A(12-F1A) G(4-B)</b></p> <p>independent of each other in different halls. For switching on markings an optical system above (2) or below the playing surface (10) is operated at a specific frequency to activate a single optically active ingredient or at several frequencies to activate ingredients producing several colors. For switching off a water pipe, heating coil or conductive flat strip may be used. Alternatively the same optical system may be used at different frequencies for switching on and off. Markings may also be produced by positioning mechanical or optical screens, e.g. holographic lenses, between the radiation source and playing surface.</p> <p><u>USE</u>  For marking sports hall surfaces according to specific sports.</p> <p><u>ADVANTAGE</u>  Markings can be rapidly created or removed for a very wide range of sports. The markings can be easily seen and are not confused with those for other sports.</p> <p>DE 19738605-A+</p>
<p><u>NOVELTY</u>  Markings can be created in the floor matrix material (11) in any combination of size, color or sequence by switching on an electromagnetic field (2), optical radiation or light or heat energy which is directed along specific lines or over certain areas to create the markings specific to a given sport. On completion of the sport the markings can be removed in similar ways ready for a following sport with different markings.</p> <p><u>DETAILED DESCRIPTION</u>  INDEPENDENT CLAIMS are also made for: (a) the marking system which comprises a carrier matrix (11), e.g. polyurethane or polyvinyl chloride, containing uniformly distributed optically reactive ingredients (7) producing colors when subjected to different radiation sources; and (b) use of the marking systems for producing markings</p>	

### DESCRIPTION OF DRAWING

The drawing shows a side view of a sports hall with a system for producing markings.

radiating equipment 2

active ingredient 7

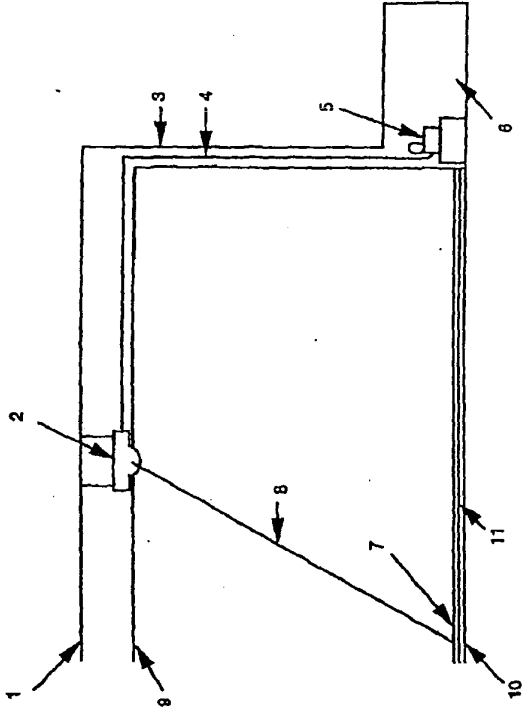
playing surface 10

floor matrix 11

programming unit 5

### TECHNOLOGY FOCUS

Computing And Control - Preferred Process: Markings can be produced by use of a personal computer using a set program and other symbols or graphics can be created using a mouse or pen with a monitor.



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